Investigation Parachute

Make a toy parachute

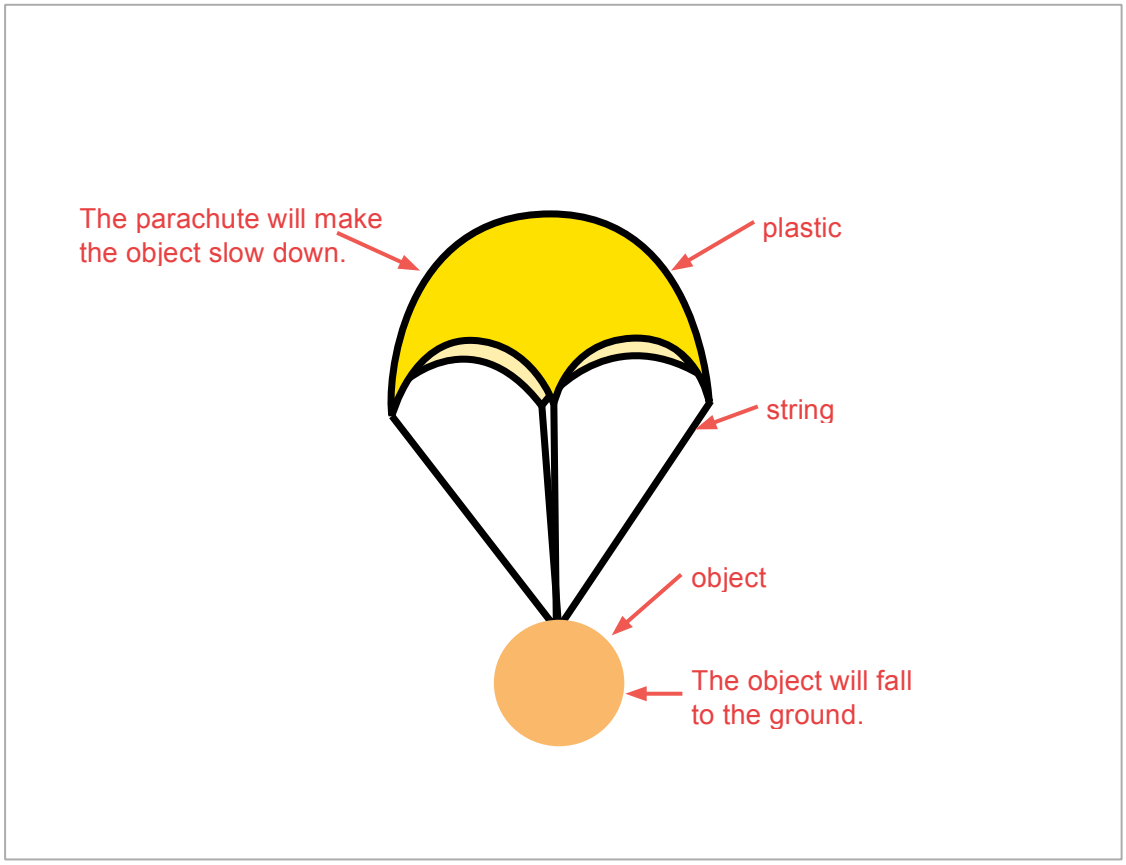
You will need:

- plastic shopping bag
- small object
- string.

Tie the object to the handles of the shopping bag using the string.

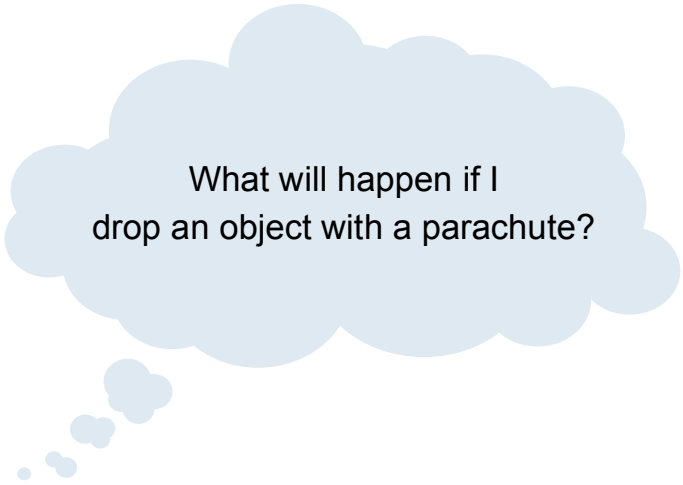
Drawing

Draw a picture of the object with the parachute.
Label the drawing to show things you predict will affect how the object moves.



This is a parachute toy.

My question



My prediction

Finish the sentence below.

I predict that if I drop the object with the parachute, the object with the parachute will fall to the ground slowly.

I think this will happen because air will go inside the bag and make it fall slowly.

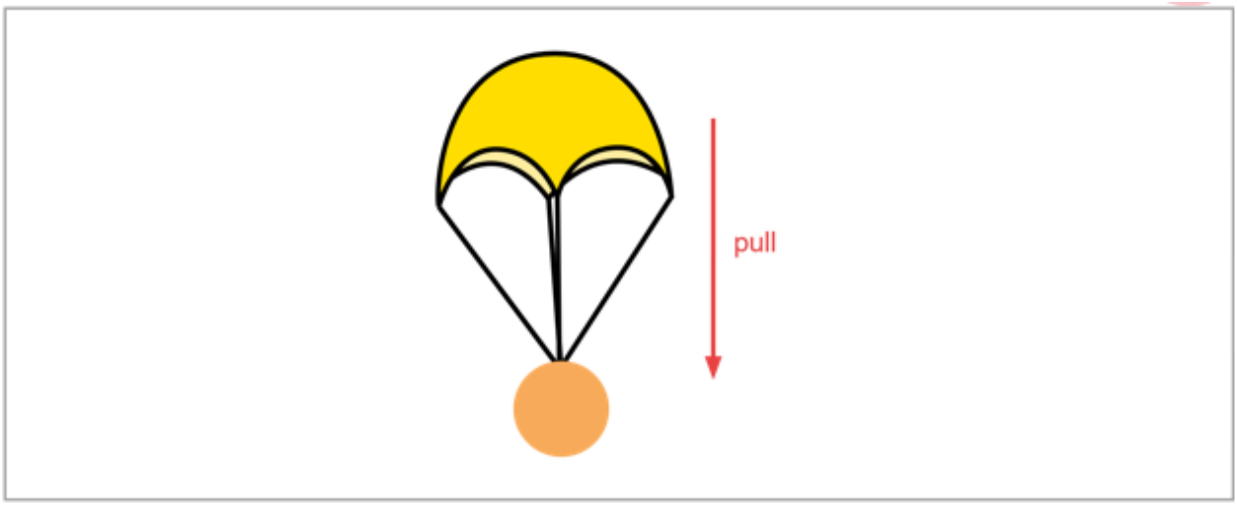
Now test the object with the parachute.

Observations and results

Draw a picture to show what happened when you dropped the object with a parachute.

Use arrows and words to describe how you moved it.

Describe how the object with the parachute moved.



How did the object with the parachute move?

The parachute fell to the ground.

How is the way the object moves with a parachute different from the way the object moves with no parachute?

The object with no parachute fell fast.

The object with a parachute floated down slowly.

Evaluation

Why did the object with the parachute move the way it did?

The plastic is light and it filled up with air. It slowed the parachute down.

How could you change the parachute to improve how it moves?

If I made a bigger parachute and dropped it from higher up, it would float down even slower.

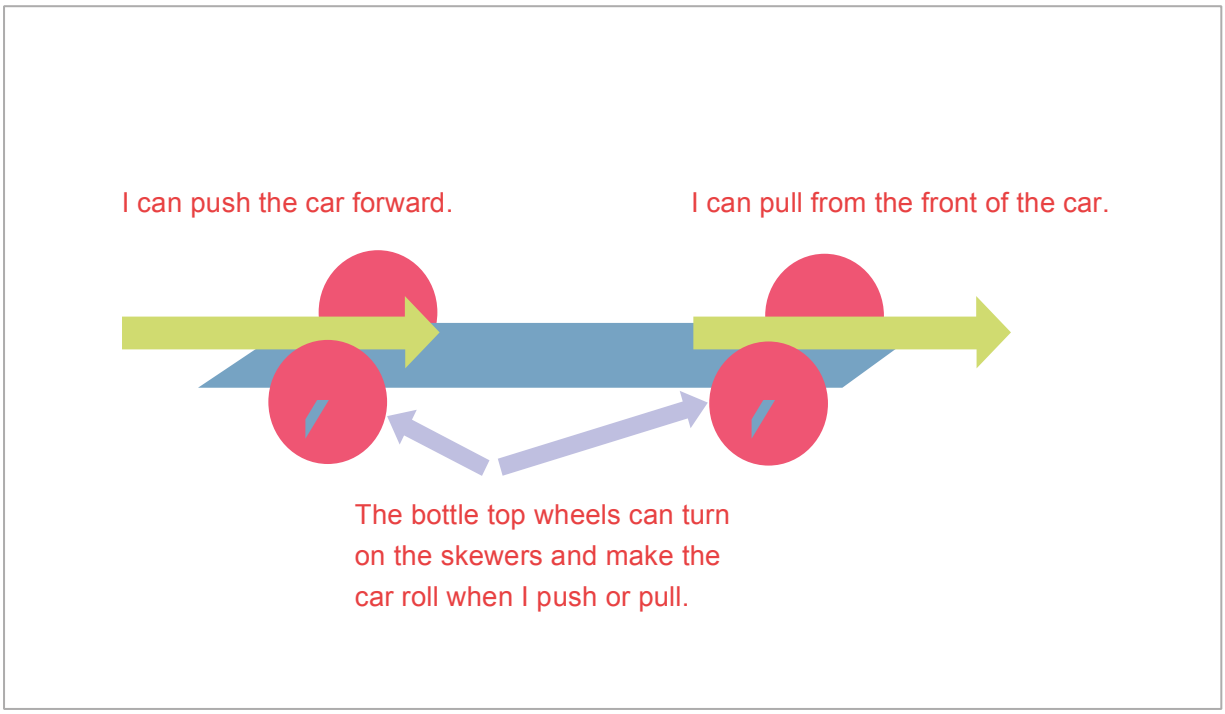
Investigation: Rolling toy

Drawing

Draw a picture of the rolling toy you will investigate.

Label the drawing to show:

- parts of the toy that will help the toy move
- the push or pull you will use to move your toy



My rolling toy is a car.

My toy will move when I push or pull it.

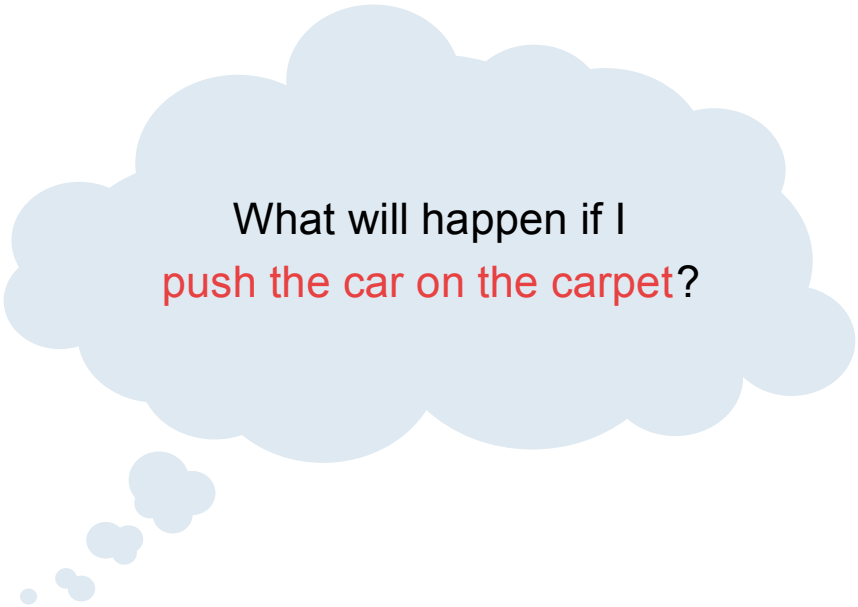
Change the way your toy rolls

List some different surfaces that may affect the way your toy rolls:

- carpet
- tiles
- wooden floor
- grass

Pose a question

Think about a question you could investigate about rolling your toy on different surfaces.



My prediction

Finish the sentence below.

I predict that if I roll the toy on the carpet it will roll more slowly than on the wooden floor.

Investigate and observe how your toy rolls

Test how your toy rolls on different surfaces.

Explain the effect of changing the surface on the way the toy moves.

Surface 1	carpet
My toy	rolled slowly
Surface 2	wooden floor
My toy	rolled easily and quickly
Surface 3	tiles
My toy	moved easily. It rolled as well as it did on the wooden floor.
Surface 4	grass
My toy	couldn't move at all on the grass. It kept stopping.

Share observations

Explain how the different surfaces affected the way the toy rolled.

My toy rolled more easily on the wooden floor and on the tiles. It couldn’t move at all on the grass. It moved slowly on the carpet. It moved easily on smooth surfaces and not as easily on bumpy and rough surfaces.